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9
10 UNITED STATES DISTRICT COURT

11 NORTHERN DISTRICT OF CALIFORNIA
12

13 **OYSTER OPTICS, LLC,**

14 **Plaintiff,**

15 **vs.**

16 **CIENA CORPORATION,**

17 **Defendant.**
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CASE NO. 4:17-cv-05920-JSW

**PLAINTIFF OYSTER OPTICS LLC'S
OPENING CLAIM CONSTRUCTION
BRIEF**

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I. INTRODUCTION

Plaintiff Oyster Optics LLC (“Oyster”) respectfully submits this opening claim construction brief. Oyster proposes constructions that are faithful to the plain and ordinary meaning of the claim terms to one of ordinary skill in the art. In each instance, Oyster’s proposals are fully consistent with the intrinsic record, including, most notably, the claim language itself. Oyster’s proposals likewise are supported by the sworn opinion of optics and telecommunications expert Dr. Michael Lebby, who explains precisely how a POSITA would understand each claim term, particularly in light of the intrinsic record.¹

Indeed, in many cases, these very disputed phrases and terms have already been construed (and in some cases, construed twice) by another Article III court in a related case—in *Oyster Optics v. Coriant America, Inc., et al.*, Case No. 2:16-CV-1302-JRG. In that case, Judge Gilstrap construed these terms only after half a dozen parties gave him and his hired technical advisor a detailed technology tutorial, numerous briefs, with expert declarations, and hours of argument during a *Markman* hearing. The resulting constructions included three well-reasoned Orders, including one spanning over 60 pages issued in late 2017 and two others issued in 2018. *Oyster Optics, LLC v. Coriant Am. Inc.*, 2:16-CV-1302-JRG, 2017 WL 6026729, at *1 (E.D. Tex. Dec. 5, 2017) (Ex. A, “2017 Order Construing These Claims”); *Oyster Optics, LLC v. Coriant Am. Inc.*, 2:16-CV-01302-JRG, 2018 WL 7019353, at *1 (E.D. Tex. Mar. 2, 2018) (Ex. B, “2018 Order on Reconsideration”); *Oyster Optics, LLC v. Coriant Am. Inc.*, 2:16-CV-1302-JRG, 2018 WL 3067727, at *1 (E.D. Tex. June 21, 2018) (Ex. C, “2018 Order Further Construing These Claims”).

Those issued constructions are precisely the ones offered by Oyster—and rejected by Ciena now. In short, Oyster’s claim-construction methodology and proposals are consistent with the factual record and controlling law.

Defendant Ciena Corporation’s (“Ciena”) proposals, on the other hand, are inconsistent

¹ The Declaration of Dr. Michael Lebby is filed concurrently with this brief and is cited herein as the Lebby Decl. Given the large overlap in disputed issues in this case and the prior one asserting the same patents before Judge Gilstrap, to maintain perfect consistency, this declaration is *the same* one Dr. Lebby provided to Judge Gilstrap before he issued his *Markman* Order. This and other exhibits cited herein are attached to the Declaration of Reza Mirzaie filed concurrently with this brief.

with the intrinsic record and in conflict with controlling law. Ciena repeatedly seeks to burden clear and ordinary terms with artificial and extraneous baggage, but cannot point to any disclaimer or lexicography to do so. This invites reversible error. *E.g., JvW Enters. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005). Indeed, many of Ciena’s narrow proposals are inconsistent with the intrinsic record—and even *exclude* embodiments taught in the specifications of the patents-in-suit. As the Federal Circuit has repeatedly held, such constructions are “rarely, if ever, correct.” *SanDisk Corp. v. Memorex Prods.*, 415 F.3d 1278, 1285-86 (Fed. Cir. 2005). For other proposals, Ciena’s proposed constructions are inconsistent with the language in the claim itself. This is also improper under controlling law.

II. BACKGROUND OF THE PATENTS-IN-SUIT

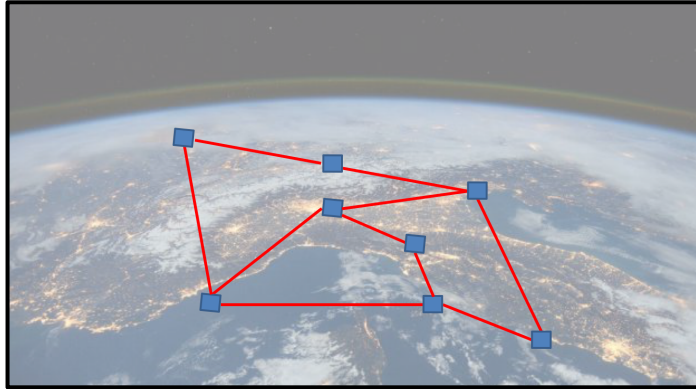
This case involves eight patents: 7,620,327 (the “’327 patent”; Ex. D); 8,374,511 (the “’511 patent”; Ex. E); and 8,913,898 (the “’898 patent”; Ex. F). The asserted patents cover numerous innovations in optical telecommunications network technology. And they are generally directed towards systems and methods for transporting information by modulating light waves transmitted and received across transparent optical fibers.

Each of the claimed systems and methods demonstrates a significant advancement over the state of the art, as they facilitate novel ways of providing a more rapid, secure, and reliable communication of enormous quantities of data over great distances.

Transceivers In Optical Telecommunications Networks

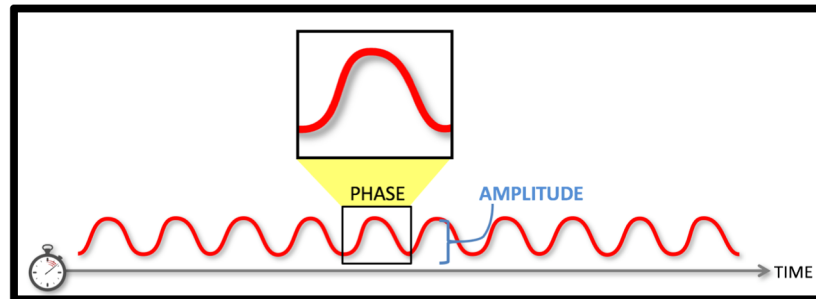
Modern high speed telecommunications network systems use light waves for digital data transmission. (Ex. G, Lebbby Decl. ¶¶17-22). Transceivers, which receive their name because they include **transmitters** and **receivers**, are usually small boxes where optical signals either originate or are received. Transceivers are important components of these systems, because they perform key aspects of the encoding, transmitting, receiving and decoding functions for optical signals. In

an optical telecommunications network, a transceiver transmits signals from one location to another location, where another transceiver receives optical signals, as shown below. *Id.*

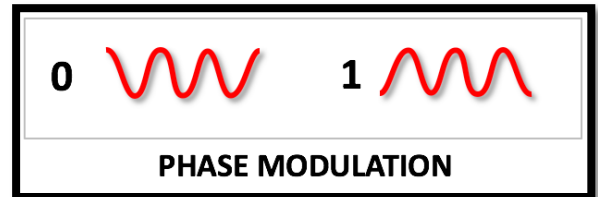
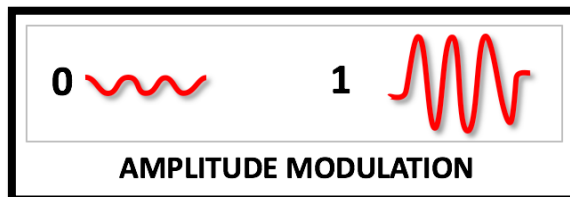


Digital-Data Transmission of Light Waves Through Modulation

A light wave is defined by various properties including amplitude and phase. When depicted as in the figure below, amplitude can be understood as the height of the wave, and phase as the position of the wave at a fixed point in time.

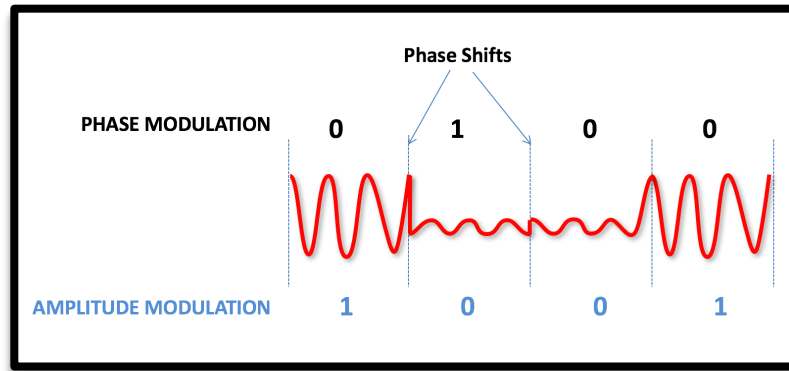


For digital data transmission, one or more of these wave properties can be modified to represent each of two possible binary values (0 or 1). For phase modulation, this is often depicted as a relative displacement such that the peaks and troughs occur at different times. The figures



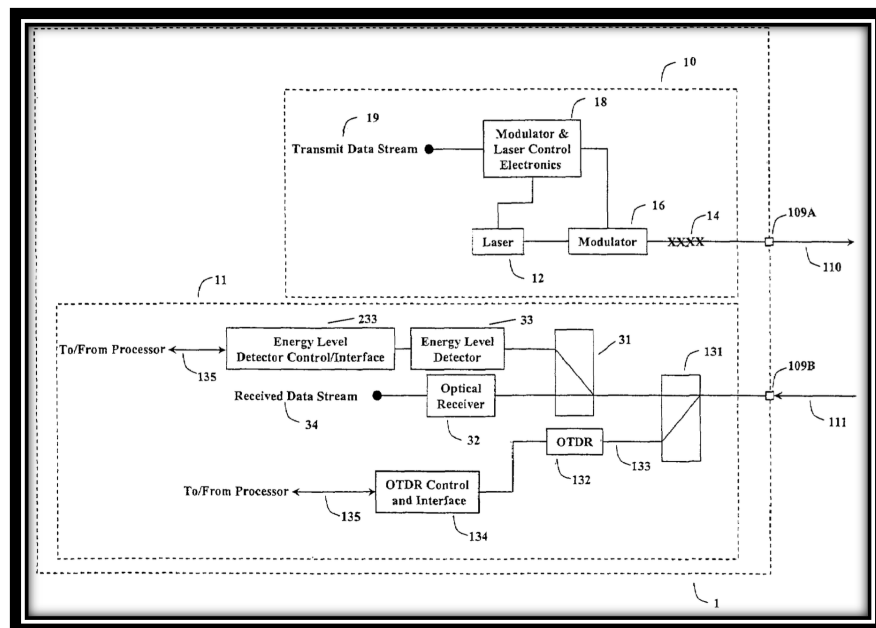
below show how either amplitude or phase can be modulated to communicate a digital 0 or 1:

Combining modulation strategies allows for the loading of even more information on a single carrier wave. For example, a single wave can be phase- *and* amplitude-modulated so that it can convey two different streams of digital data on the same carrier light wave. This is depicted in the below figure:



Energy Level Detectors

The patents-in-suit incorporate a number of novel combinations for enhancing the function of optical networks – features especially useful for monitoring high-speed, high-bandwidth optical networks with a low tolerance for signal degradation. For example, the patents teach novel combinations with receiver-side energy level detectors. As shown in the below example, detectors can tap a portion of the optical signal, convert the optical energy into an electrical signal, and then average those electrical signals. *See, e.g.,* Ex. D, '327 patent, Fig. 3. Using this novel approach,



1 the systems can monitor the optical power of network transmissions—and do so continuously. The
 2 system can then trigger alarms if the power falls below various acceptable energy threshold values.
 3 *See, e.g.*, Ex. D, '327 patent at Fig. 2 at 31, 33, 233.

4 This novel combination of structures, in turn, provides benefits and advancements in
 5 reliability, speed, and security of the optical transmissions. Ex. G, Lebby Decl. ¶ 35. For example,
 6 this combination ensures that the telecommunications system maintains a certain threshold of
 7 power and, therefore, maintain a reliable and rapid transmission rates. *Id.* It also “provid[es] an
 8 optimized cost of implementation benefit to the customer.” *See, e.g.*, Ex. D, '327 patent at 2:59–
 9 3:13.

10 **III. CLAIM CONSTRUCTION PRINCIPLES**

11 The “claim construction inquiry . . . begins and ends in all cases with the actual words of
 12 the claim.” *Teleflex, Inc. v. Ficos N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002).

13 When conducting a claim construction inquiry, “district courts are not (and should not be)
 14 required to construe every limitation present in a patent’s asserted claims.” *O2 Micro Int’l v.*
 15 *Beyond Innovation Tech.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). This is because claim construction
 16 is “not an obligatory exercise in redundancy.” *United States Surgical Corp. v. Ethicon, Inc.*, 103
 17 F.3d 1554, 1568 (Fed. Cir. 1997). Where a term is used in accordance with its plain meaning, the
 18 court should not re-characterize it using different language. *See Mentor H/S, Inc. v. Med. Device*
 19 *Alliance, Inc.*, 244 F.3d 1365, 1380 (Fed. Cir. 2001) (“[T]he court properly instructed the jury that
 20 these terms should receive their ordinary meanings.”).

21 To the contrary, there is a “heavy presumption” that claim terms carry their “full ordinary
 22 and customary meaning, unless [the accused infringer] can show the patentee expressly
 23 relinquished claim scope.” *Epistar Corp. v. ITC*, 566 F.3d 1321, 1334 (Fed. Cir. 2009). And
 24 because “the ordinary and customary meaning of a claim term is the meaning that the term would
 25 have to a person of ordinary skill in the art in question at the time of the invention,” the task of
 26 comprehending the claims often “involves little more than the application of the widely accepted
 27 meaning of commonly understood words.” *Phillips*, 415 F.3d at 1313-14.

“There are only two exceptions” in which claim terms are not given their “full ordinary and customary meaning: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.”). *Thorner v. Sony Computer Entertainment Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular terms.” *Phillips*, 415 F.3d at 1314. And the other parts of the intrinsic record also shed light on the meaning of claim terms. *Id.* However, without clear and unambiguous disclaimer or lexicography by the patentee, courts “do not import limitations into claims from examples or embodiments appearing only in a patent’s written description, even when a specification describes very specific embodiments of the invention or even describes only a single embodiment.” *JVW Enters.*, 424 F.3d at 1335. Similarly, statements during patent prosecution do not limit the claims unless the statement is a “clear and unambiguous disavowal of claim scope.” *Omega Engineering, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325 (Fed. Cir. 2003) (“[W]e have thus consistently rejected prosecution statements too vague or ambiguous to qualify as a disavowal of claim scope.”).

IV. AGREED CONSTRUCTIONS

Oyster and Ciena have agreed to the following constructions:

U.S. Patent No. 8, 374,511	
“the optical signals” (’511 patent – cl. 1, 9)	“the optical signal transmitted by the transmitter”
“an electric signal” (’511 patent – cl. 1, 9)	“an electrical signal”
“the electrical signal” (’511 patent- cl. 1, 9)	“an electric signal” is the antecedent basis for the term “the electrical signal”
“filtering the electrical signal to produce an average optical power” (’511 patent – cl. 1, 9)	“filtering the electrical signal from the photodetector to provide the average optical power of the optical signals”
5. “the phase-modulated optical signals” (’511 patent – cl. 9)	“the phase-modulated optical signal transmitted by the transmitter”

U.S. Patent No. 8,913,898	
“the second optical signal” (‘898 patent – cl. 1, 4, 14, 18, 23)	“a second optical signal” is antecedent basis for “the second optical signal”
“transceiver card” (‘898 – cl. 1, 14)	“transceiver card” is “a card having a transmitter and a receiver. This term is limiting both in the preamble and in the body of the asserted claims.”

V. DISPUTED CONSTRUCTIONS FOR THE PATENTS-IN-SUIT

A. “the optical signals” (‘327 cl 1, 14, 25, 36)

Oyster’s Proposed Construction	Ciena’s Proposed Construction
“the optical data signals received on the fiber input from the second optical fiber”	“transmitting optical signals” is antecedent for “the optical signals”, <i>otherwise</i> : Indefinite

As with many of the disputed terms before this Court, this term was previously construed, precisely as Oyster proposes here. Ex. A, 2017 Order Construing These Claims, at 36-42.

In his Order, Judge Gilstrap correctly recognized that “although the proper antecedent basis for the phrase ‘the optical signals’ is not explicit, the claim is nonetheless readily understandable.” *Id.* at 38 (*citing Microprocessor Enhancement Corp., v. Texas Instruments, Inc.*, 520 F.3d 1367, 1376 (Fed. Cir. 2008) (“the well-settled rule [is] that claims are not necessarily invalid for a lack of antecedent basis”); *see also Bose Corp., v. JBL, Inc.*, 274 F.3d 1354, 1359 (Fed. Cir. 2001) (noting that even the Manual of Patent Examining Procedure provides an example that “the limitation ‘the outer surface of said sphere’ would not require an antecedent recitation that the sphere have an outer surface.”). In that same Order, Judge Gilstrap held that Oyster’s interpretation of the disputed term is consistent with the disclosed embodiments in the patent but Ciena’s current proposal, “by contrast, would appear too result in inoperability [of those embodiments] and is therefore disfavored.” Ex. A, 2017 Order Construing These Claims, at 38-39.

At bottom, per the claim language and the patent specification, a POSITA would only understand “the optical signals” to be those claimed signals received on the fiber input “from the

second optical fiber.” Oyster’s proposal should be accepted and, respectfully, Ciena’s “gotcha” construction is faulty and should be rejected.

1. The Intrinsic Record Confirms a POSITA Can Only Interpret It One Way: “The Optical Signals” Are the “Optical Data Signals Received on the Fiber Input From the Second Fiber”

“To begin with, the context in which a term is used in the asserted claim can be highly instructive.” *Phillips*, 415 F.3d at 1314. Here, the entire, expressly claimed context is instructive and makes clear that Oyster’s proposed construction is correct. Claim 1, for example, recites:

1. A transceiver card for a telecommunications box for transmitting data over a first optical fiber and receiving data over a second optical fiber, the card comprising:
 - a transmitter *for transmitting data over the first optical fiber* ... the transmitter transmitting optical signals for telecommunication as a function of the input data;
 - ...
 - a fiber input for connecting the second optical fiber to the card;
 - a receiver optically connected to the fiber input *for receiving data from the second optical fiber*; and
 - an energy level detector *optically connected between the receiver and the fiber input* to measure an energy level of *the optical signals*...

The claims themselves confirm that “the optical signals” are the optical data signals originating over the second optical fiber associated with the claimed receiver, not the different “first optical fiber” associated with the transmitter. For example, the energy level detector that measures the energy level of “the optical signals” is optically connected between the receiver and the fiber input, meaning that this energy level detector receives a portion of the optical signals that arrive on the second optical fiber. Accordingly, a POSITA would recognize that “the optical signals” that are being measured in the claims are optical signals received at the transceiver card over the second optical fiber, after having being transmitted by a separate and distinct transmitting device at the opposite end of that fiber. Oyster’s proposed construction is correct.

2. Ciena’s Proposed Construction Is, at Best, Confusing; At Worst, It Is Legally Incorrect and Contradicted by the Entire Intrinsic Record.

Ciena proposes that this term should be construed to require that “transmitting optical signals” provides antecedent basis for “the optical signals.” This is confusing and does not help

1 the trier of fact because it is unclear. Specifically, Ciena’s proposal can be interpreted in more than
 2 one way. The “transmitting optical signals” can be interpreted as merely describing how the
 3 claimed receiver transmits one class or kind of data signals, namely, the “optical signals *for*
 4 *telecommunication*” recited earlier in the claim. (Emphasis added.) This is the same class or kind
 5 of data signals that are received and measured by the claimed transceivers. This would be
 6 consistent with the claims and the other parts of the intrinsic record, because “the optical signals”
 7 can still be those received on the fiber input from the second optical fiber.

8 But Ciena may argue that its proposed construction should be interpreted to mean that “the
 9 optical signals” cannot be those optical signals received on the fiber input from the second optical
 10 fiber. Specifically, Ciena may argue its proposed construction requires that each of “the optical
 11 signals” measured correspond to the previously transmitted optical signal from the same
 12 transceiver in a (possibly endless) loop, that construction is wrong and would lead to reversible
 13 error. In that case, in view of the intrinsic record, a POSITA would never interpret the claims that
 14 way. From the perspective of a POSITA, the function of transceivers in optical
 15 telecommunications is to send optical signals over a distance to other transceivers. Ex. G, Lebby
 16 Decl. ¶ 79. In turn, those other, distanced transceivers have receive functions to receive the signals
 17 and then process and convey them downstream. *Id.* In fact, optical telecommunications or
 18 networks do not work unless optical signals can convey information. *Id.* ¶ 81. Information is
 19 conveyed from one transceiver (with a transmit function) to another transceiver (with receive
 20 function) physically located elsewhere in the optical network.

21 The claims, specification and even prosecution history of the ’327 patent uses the term
 22 “transceiver” only in this same sense. Ex. G, Lebby Decl. ¶¶ 79-88. Starting with the claims, two
 23 key elements make clear that “the optical signals” must refer to the signals received from *another*
 24 transceiver and *not the same* transceiver. First, the preamble and the body of the claims expressly
 25 state that the transceiver card is for “telecommunications” and that the transmitter component
 26 transmits “optical signals for telecommunication” and does so “as a function of the input data.”
 27 Ex. D, ’327 patent at cls. 1, 14, 25, 36. Because telecommunications requires communicating
 28 signals over a distance, a POSITA can only understand this transmitter to be conveying signals to

1 another transceiver, not in a loop back to the same transceiver. Ex. G, Lebby Decl. ¶ 90. Second,
 2 the claims confirm the optical signals transmitted by the transmitter and the optical signals received
 3 on the receiver travel *over different optical fibers*. Per that express language, the transmitter
 4 component transmits optical signals over a *first* optical fiber and receiver connected to the energy
 5 level detectors obtain “the optical signals” over a *second* optical fiber. Ex. D, ’327 patent at cls. 1,
 6 14, 25, 36.

7 Indeed, if Ciena were to argue that its proposal requires that each of “the optical signals”
 8 measured correspond to the previously transmitted optical signal from the same transceiver, they
 9 would face another, even bigger problem. Their proposed construction *excludes all embodiments*
 10 in the specifications, including the preferred embodiments. Ex. G, Lebby Decl. ¶ 90. It is settled
 11 Federal Circuit law that such constructions are “*rarely, if ever, correct.*” *SanDisk*, 415 F.3d at
 12 1285-86 (emphasis added).

13 A POSITA would only interpret the ’327 patent as an approach to conveying optical signals
 14 from one transceiver to different transceiver. Ex. G, Lebby Decl. ¶ 79. In other words, the patent
 15 only teaches and claims transceivers that include transmitters that transmit optical signals to the
 16 input of a receiver in another transceiver. Indeed, in all embodiments of the ’327 patent, including
 17 in particular Figures 2 and 3 and their corresponding specification descriptions, a POSITA would
 18 understand that the patent teaches that the transceiver is not receiving the same signal it is sending
 19 out. *Id.* ¶ 80. There is no connection drawn, nor is there any description of the transmitter optical
 20 signal going elsewhere other than out of the transceiver to a receiver in the optical network. *Id.* A
 21 receiver in the optical network would be a different receiver than where the transmitted signal has
 22 been generated. *Id.* Similarly, for the receiver, the patent teaches only that the received signal
 23 comes from another transceiver in the optical network.

24 The other aspects of the intrinsic evidence uniformly support this point. This includes the
 25 title of the ’327 patent, which reflects a “Fiber Optic ***Telecommunications Card*** With Energy
 26 Level Monitoring.” (Emphasis added.) Likewise, the Abstract makes clear that the invention is
 27 about a “transceiver card ***for a telecommunications box*** for transmitting data ***over a first optical***
 28 ***fiber*** and receiving data ***over a second optical fiber.***” Similarly, the “Field of the Invention” is

“telecommunications” and, more particularly, transmitters and receivers for “fiber optic networks.” ’327 patent at 1:10-13. And the specification consistently and only teaches the use of a fiber optic transceiver with both transmit and receive functions. The transmit signal is sent off of the transmitter via fiber 110, while a received optical signal from some other transceiver is received via fiber 111. Lebbby Decl. ¶ 79. The fibers are not connected together; in fact, the fibers are independent of each other. *Id.* One fiber is utilized for sending optical signals, while the other fiber receives signals from another transceiver. *Id.* There is a system router that decides which optical signals go where, but all optical signals must reach to the router to figure out their destination. *Id.*

If there were any doubt, a review of the key prosecution history on this point would confirm this point beyond any reasonable debate. Specifically, the patentee received a USPTO office action involving a reference called “Darcie,” which had a non-traditional, looped-back transceiver for “diagnostics.” Ex. H. In responding to that office action, after adding “the optical signals” element to the then-pending claims, the patentee drew a sharp distinction between optical signals used for “*diagnostics*,” on the one hand, and those used for “*telecommunications*,” on the other hand, like the claims here. Ex. I at 9-10 (emphasis added); Ex. G, Lebbby Decl. ¶ 88. Indeed, the patentee further explained that “the optical signals” added to the claims were measured for telecommunications, not for “diagnostics,” as in Darcie and, therefore, it would not have been obvious to a POSITA to even use such a fundamentally different device like the diagnostic-measuring device in Darcie. Ex. I at 10.

Ciena’s Indefiniteness Argument Also Fails Because, in View of the One-Sided Intrinsic and Extrinsic Record, the Scope of the Claim Would Be Reasonably Ascertainable By a POSITA

Ciena asserts in the alternative that this Court should invalidate the claim for indefiniteness. A patent is invalid for indefiniteness if an accused infringer can demonstrate, with clear and convincing evidence, that its claims “fail to inform with reasonable certainty those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014). “[T]he certainty which the law requires in patents is not greater than reasonable, having regard to their subject matter.” *Id.* (quoting *Minerals Separation, Ltd. v. Hyde*, 37 S. Ct. 82

(1916)). An accused infringer must demonstrate indefiniteness with clear and convincing evidence. *Nautilus*, 134 S. Ct. at 2132, n.10.

Ciena’s argument that the claims are clearly and convincingly invalid for indefiniteness centers on the lack of explicit antecedent basis tied to “the optical signals.” More particularly, Ciena has asserted that the only place where the exact, explicit words “optical signals” appears in the claim prior to “the optical signals” is the reference to optical signals transmitted by transmitter in the same transceiver card. Thus, their argument goes, if that first reference to optical signals does not serve as the antecedent basis for “the optical signals,” the patent claims do not have an explicit antecedent basis and, therefore, must be indefinite.

Ciena cannot meet its burden here. As Judge Bryson recently held in addressing a similar argument in *Trover Group, Inc. v. Dedicated Micros, USA*, “the Federal Circuit has noted that it is a ‘well-settled rule that claims are not necessarily invalid for lack of antecedent basis.’” No. 2:13-cv-1047-WCB, 2015 WL 1263358 at *9 (E.D. Tex. Mar. 19, 2015) (citing cases). Instead, “[i]f the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite.” *Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370–71 (Fed. Cir. 2006).

Here, as in *Trover*, the scope of all claims with the term “the optical signals” would be reasonably ascertainable by a POSITA. Ex. G, Lebby Decl. ¶ 89. As discussed above, and further explained by optics technical expert, Dr. Michael Lebby, the claims themselves make clear that “the optical signals” are the optical data signals originating over the second optical fiber associated with the claimed receiver. *Id.* ¶¶ 79-88. And the specification and prosecution history of the ‘327 patent uniformly support this point as well. *Id.* Thus, a POSITA would understand that there are—and must be—“optical signals” that are received over the second optical fiber and that have been transmitted by another device at the other end of that second optical fiber, outside of the transceiver card. *Id.*

B. “receiver” (’327 cl. 1, 14, 25, 36; ’511 cl. 1, 9; ’898 cl. 1, 14)

Oyster’s Proposed Construction	Ciena’s Proposed Construction
’327 and ’511 patents: No construction necessary (“receiver”)	“receiver without a demodulator”
’898 patent: “receiver without a demodulator”	

This precise dispute has previously been resolved by Judge Gilstrap. Ex. A, 2017 Order Construing These Claims, at 30-36. In that case, Oyster argued that the term “receiver” required no construction in any of the ’327, ’511, and ’898 patents, while the defendants argued that it should be construed as “receiver without a demodulator” in all three patents. The court adopted the defendants’ proposal for the ’898 patent, but held that “receiver” had its plain meaning in the ’327 and ’511 patents.

The same constructions should be adopted in this case. The ’898 patent is a continuation of the ’511 patent, which is in turn a continuation of the ’327 patent. During the prosecution of the application leading to the ’898 patent, the examiner issued a non-final office action dated June 26, 2013, which rejected proposed claims containing the phrase “a receiver having a demodulator,” as not enabled under 35 U.S.C. § 112. Ex. J at 3. In response, the applicant amended its claims to remove the phrase “having a demodulator.” Ex. K at 2, 4, 6–8. Judge Gilstrap found that this amendment amounted to a disclaimer of receivers having demodulators with respect to the ’898 patent. Oyster accepts that the construction of “receiver without a demodulator” for the ’898 patent is binding on it in other cases, including this case, and it does not dispute that construction here.

The situation for the ’327 and ’511 patents is different, however. The ’327 patent issued on November 17, 2009 and the ’511 patent on February 12, 2013. Ex. D, ’327 patent; Ex. E, ’511 patent. So both patents had issued before the June 26, 2013 office action or the resulting amendment that removed “having a demodulator.” Accordingly, Judge Gilstrap held that “the enablement rejection and the responsive amendments were specific to the claims of the ’898 patent” and that the disclaimer did not apply to the ’327 or ’511 patent claims. Ex. A, 2017 Order Construing These Claims, at 34–35.

The defendants in the cases before Judge Gilstrap moved for reconsideration, on the specific issue of whether the disclaimer also applied to the ’327 and ’511 patents. Judge Gilstrap

1 carefully considered the cases cited by defendants and concluded that they only confirmed the
2 propriety of the original construction. Ex. B, 2018 Order on Reconsideration at 8. The persuasive
3 reasoning of Judge Gilstrap should be applied in this case, as well.

4 The established rule is “[a]s long as the same claim limitation is at issue, prosecution
5 disclaimer made on the same limitation **in an ancestor application** will attach.” *Omega Engr., Inc.*
6 *v. Raytek Corp.*, 334 F.3d 1314, 1333 (Fed. Cir. 2003) (emphasis added); *Elkay Mfg. Co. v. Ebco*
7 *Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999) (“When multiple patents derive from the same initial
8 application, the prosecution history regarding a claim limitation in any patent that has issued
9 applies with equal force to **subsequently** issued patents that contain the same claim limitation.”
10 (emphasis added)).

11 There is good reason to only consider disclaimers in ancestor applications and to disregard
12 disclaimers made after the patent issued. If that were not the rule, then patentees could narrow the
13 claims of their already issued patents at will to avoid prior art, many years after they have issued
14 and possibly even after they have asserted those patents in litigation, without being subject to the
15 limitations on amendments that are available by reissue, reexamination, or in PTAB proceedings.
16 *See* 35 U.S.C. §§ 251–252, 307, 316(d). It is fairest to potential infringers—and non-infringers in
17 the public at large—that claim terms be interpreted based upon facts that exist and are publicly
18 knowable at the time the patent issues, and not on statements made in prosecution of subsequent
19 applications, years into the term of the patent.

20 Beyond these arguments for such disclaimer, there is a “heavy presumption” that claim
21 terms carry their “full ordinary and customary meaning[.]” *Epistar*, 566 F.3d at 1334. And here,
22 there is no dispute on the customary meaning of the disputed term, “receiver.” Ex. G, Lebby Decl.
23 ¶ 37 (explaining how a POSITA would have recognized the term “receiver” as a well-known
24 device, with a straightforward plain and ordinary meaning in the context of optical networks).
25 Indeed, Ciena’s proposed construction confirms this—as it uses the very disputed claim term in it.
26 It needs no further construction.

For all these reasons, this Court should adopt the same constructions for “receiver” as adopted in the Eastern District of Texas. The disclaimer of scope for the term “receiver” should only apply to the ’898 patent, and the term should be given its plain meaning in the other patents.

**C. “receiver configured ... to convert the second optical signal to output data”
(’898 cl. 1, 14)**

Oyster’s Proposed Construction	Ciena’s Proposed Construction
“receiver” is a receiver without a demodulator, as set forth above. Otherwise, no construction necessary.	“a receiver that converts the second optical signal <u>from optical to electronic form to recover the data carried by the second optical signal</u> ”

The parties agree that “receiver” in the ’898 patent should be construed as a “receiver without a demodulator.” Nothing else in this term requires construction. The phrase “convert the second optical signal to output data” is clear and does not require elaboration for the jury. *US Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (claim construction is “not an obligatory exercise in redundancy.”).

Ciena’s construction seeks to limit this term by importing features from the specification, including the requirement of conversion to “electronic form” and the requirement of “recover[ing]” data in addition to “covert[ing].” The requirement of conversion to “electronic form” mirrors a construction proposed by defendants in the prior Texas case. There, the defendants originally proposed a construction that required conversion “to an electrical signal.” Ex. A, 2017 Order Construing These Claims, at 30 n.7. But they withdrew that construction after seeing Oyster’s opening *Markman* brief, and the court did not adopt a construction requiring conversion “to an electrical signal.” *Id.* This Court should decline to do so as well.

Ciena cites to two instances where the ’898 patent specification mentions conversion to electronic data. The first is in a discussion of prior art amplitude-modulated systems (not the phase modulated system preferably used in the invention), which never uses the word “receiver” in connection with the “output electronic data stream.” ’898 patent at 1:42–45. The other instance is

in a discussion of a “preferred embodiment.” *Id.* at 3:65, 5:2–5. This second instance is also the only place that the specification mentions “recover[ing]” data. *Id.* at 5:2–5.

Ciena’s effort to narrow this term from its plain and ordinary meaning (subject to the disclaimer with respect to demodulators) based upon examples in the specification should be rejected. Other forms of receiver beside the specific prior art and preferred embodiments disclosed in the specification are possible (Ex. G, Lebbly Decl. ¶¶ 37–38) and should not be excluded from the construction of this phrase. Without clear and unambiguous disclaimer or lexicography by the patentee, courts “do not import limitations into claims from examples or embodiments appearing only in a patent’s written description.” *JVW Enters.*, 424 F.3d at 1335. Indeed, this is true “even when a specification describes very specific embodiments of the invention *or even describes only a single embodiment.*” *Id.* (emphasis added). The court should reject Ciena’s faulty attempt to import additional limitations into the clear language of the claim. Oyster’s proposed construction should be adopted.

D. “an energy level detector including a threshold” / “an energy level detector includes a plurality of thresholds” (’327 cl. 1, 14, 25; ’898 cl. 1, 14)

Oyster’s Proposed Construction	Ciena’s Proposed Construction
“an energy level detector” means “a device to measure optical power.” The remainder of the disputed phrase requires no further construction.	<p>“a <u>single</u> energy level detector on a transceiver card and including <u>a reference voltage for comparison to the energy level of</u> [the optical signals / the second optical signals]</p> <p>“a <u>single</u> energy level detector on a transceiver card and including <u>reference voltages for comparison to the energy level of</u> [the optical signals / the second optical signals]</p>

Oyster’s proposed construction includes the construction that Judge Gilstrap provided for “energy level detector” in the related Texas case. Ex. A, 2017 Order Construing These Claims, at 21-25. Beyond this, the parties do not really dispute the term “including” (used in all the claims) or the term “plurality” (used in a subset of the claims).

1 Thus, the only remaining single word in “dispute” is: “threshold.” But that term—both
2 alone and with its surrounding, contextual claim language—has a clear plain meaning to a POSITA
3 or even a lay person. Thus, it needs no construction, let alone the distorted nine-word importation
4 that Ciena improperly seeks. Indeed, where a term is used in accordance with its plain meaning,
5 the court should not replace it with different or additional language. *Thorner*, 669 F.3d at 1366-67
6 (“we do not redefine words. Only the patentee can do that.”).

7 Ciena’s proposal has two fatally flawed importations. On the first, Ciena takes the phrase
8 “an energy level detector” and restricts it to a “single energy level detector.” That clearly
9 contravenes controlling precedent. The Federal Circuit has “repeatedly emphasized [that] an
10 indefinite article ‘a’ or ‘an’ in patent parlance carries the meaning of ‘one or more[.]’” *Baldwin*
11 *Graphic Sys., v. Siebert, Inc.*, 512 F.3d 1338, 1342-43 (Fed. Cir. 2008) (describing this as a “rule,
12 rather than merely as a presumption or even a convention”). The “exceptions to this rule are
13 extremely limited” and only arise where “the claims themselves, the specification, or the
14 prosecution history *necessitate a departure from the rule.*” *Id.* (emphasis added). There is no such
15 history here.

16 On the second flawed importation, Ciena’s proposal takes the simple claim term
17 “threshold” and replaces it with about eight words of its own choosing, namely, “reference
18 voltages for comparison to the energy level of” But this restriction goes far beyond the plain
19 meaning of the term “threshold.” And without clear and unambiguous disclaimer or lexicography
20 by the patentee, courts “do not import limitations into claims from examples or embodiments
21 appearing only in a patent’s written description.” *JVW Enters.*, 424 F.3d at 1335. Indeed, this is
22 true “even when a specification describes very specific embodiments of the invention *or even*
23 *describes only a single embodiment.*” *Id.* (emphasis added). The court should reject Ciena’s faulty
24 attempt to import both limitations into the clear language of the claim.

E. “phase modulate” / “phase modulator” (’327 cl. 1, 14, 25, 36; ’511 cl. 1, 9; ’898 cl. 1, 14)

Oyster’s Proposed Construction	Ciena’s Proposed Construction
alter the phase of light to create an optical signal having a phase that is representative of data. Use of phase modulation excludes use of amplitude modulation.	alter the phase of light <u>while keeping the amplitude of the light constant</u> to create an optical signal having a phase that is representative of data

This term was also previously construed *twice* by Judge Gilstrap—again, precisely as Oyster proposes here. Notably, the second construction was a “clarification” by the court, required after it received into evidence over a dozen pieces of intrinsic and extrinsic evidence in the form of expert declarations and deposition transcripts. And that evidence which confirmed that the very construction Ciena proposes now would *exclude* the preferred embodiment and virtually every phase modulation system ever known to man.

On the merits, Oyster’s construction is the only correct one. The parties agree that the meaning of “phase modulate” includes “alter[ing] the phase of light to create an optical signal having a phase that is a function of data.” Oyster’s construction is faithful to any reasonable reading of the intrinsic record as it excludes an alternative type of modulation, amplitude modulation. But, by also requiring that the term “keep[] the amplitude of the light constant,” Ciena’s construction requires the claimed phase modulation process to exclude much, much more.

The sleight of hand built into Ciena’s faulty construction—excluding amplitude modulation and also excluding any type of amplitude alteration at all—goes too far. The “claim construction inquiry ... begins and ends in all cases with the actual words of the claim.” *Teleflex, Inc.*, 299 F.3d at 1324. Here, Ciena’s construction must be rejected because the claims make clear that the amplitude can change during phase modulation. For example, claim 14 of the ’327 patent recites an energy level detector including a threshold “indicating *a drop in amplitude of a phase-modulated signal*.” (Emphasis added.)

Under Ciena’s proposal, this claim would be rendered nonsensical—as there could never be “a phase-modulated” signal with “a drop in amplitude.” This proposal must be rejected. Indeed, even where the patents discuss situations in which the amplitude might be kept constant, they still make clear this is unnecessary. For instance, the ’898 patent discusses a “phase-modulated mode”

in which “amplitude of the optical signal is constant.” *Id.* at 4:44-52. In the same paragraph, the specification states that other forms of modulation, including “conventional amplitude-modulated transmitters and receivers ... may also be used.” *Id.*

Beyond the claims, the specifications also make clear that Ciena’s proposal is wrong. In fact, the patents explicitly contemplate changing the amplitude as well as the phase of the light. For example, in topically related Oyster patents, discuss a “controller” separately connected to a “laser” and a “phase modulator,” as depicted on the left side of Figure 1 in the ’816 patent:

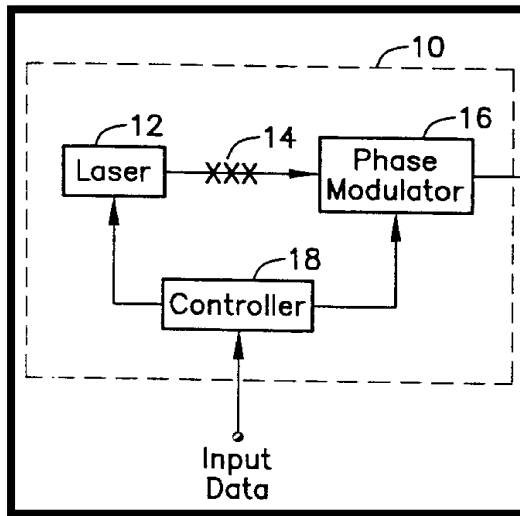


Fig. 1. The patent explains that “[c]ontroller 18 is also programmable to control the optical power output of the light emitted by laser 12.” *Id.* at 3:66-67. With this teaching, a person of ordinary skill in the art (“POSITA”) would have recognized that, in this embodiment, if one changes the power output of the light, one is changing its amplitude. Lebbly Decl. ¶ 29. Ciena’s proposal, however, would exclude this embodiment. Such constructions excluding embodiments are “*rarely, if ever, correct.*” *SanDisk Corp.*, 415 F.3d at 1285-86 (reversing construction that excluded embodiments described in specification).

Indeed, these fatal flaws are the very reasons the construction of term had to be “clarified” by Judge Gilstrap in 2018, resulting in what Oyster now proposes as the proper construction. After receiving dozens of pieces of intrinsic and extrinsic evidence, the court determined that the manner in which Ciena’s current proposal could be interpreted—and actually was being interpreted—would exclude not only amplitude modulators, but *virtually all phase modulators* as well. In fact, the sworn testimony of defendant’s own experts in the prior cases proved this point. For example, defendant expert Dr. Kahn conceded this point during deposition:

Q. . . . So is it your opinion that most and possibly all commercially available optical telecommunications transponders use modulators that, by design, create a signal that does not meet the court’s claim construction for phase modulate?

A. Yes.

Q. And does that include most and possibly all commercially available optical telecommunications transponders that transmit using phase shift keying?

A. Yes.

Q. When you say most and possibly all commercially available optical telecommunications transponders, are you aware of even a single commercially available transponder that performs phase shift keying and satisfies the court’s claim construction for phase modulate as you’ve applied that construction?

A. Yes. I’m just going to really mine my memory for a moment here. I’m not aware of any.

(Dkt. No. 367, Ex. OYS-COR-B, Mar. 8, 2018 Kahn dep. at 134:5–24.)

Ex. C, 2018 Order Further Construing These Claims at 13. And another of the defendants’ experts, Dr. Buck, did the same:

Q So if I’m understanding your testimony just now, are you saying that when you use a Mach-Zehnder phase modulator, and you change the signal from being one phase to being a different phase, there will be a dip in the amplitude during that transition?

A Yes.

Q Is there any way to avoid having a dip in the amplitude during the transition from one phase to another when using a Mach-Zehnder modulator to phase modulate a signal?

A It is unavoidable.

Id. at 11–12.

In sum, Oyster’s proposed construction of “phase modulate” is the only one that is consistent with the plain and ordinary meaning of the term in the art. To a POSITA, the plain and ordinary meaning of “phase modulate” is the first sentence of Oyster’s proposal: alter the phase of light to create an optical signal having a phase that is a function of data. Ex. G, Lebby Decl. ¶ 33. Accepting and including a negative importation of “amplitude modulation,” as Oyster’s proposal does, requires adding the second sentence of Oyster’s proposal.

Ciena’s proposal, on the other hand, rest on an interpretation of “phase modulation” that goes far beyond merely excluding “amplitude modulation.” Ciena seeks to exclude any modulation technique that *ever alters* the amplitude of light, regardless of whether that alteration results in amplitude modulation. In other words, it appears to also exclude phase-modulation techniques that include *any* alteration to the amplitude of light, ever. In deciding this issue on claim scope, Judge Gilstrap’s Order, the patent’s intrinsic record, and Federal Circuit law all compel the same outcome: Defendant’s interpretation must be rejected.

F. “a transmitter having a laser, a modulator, and a controller” (’327 patent cl. 1, 14, 25, 36; ’898 cl. 1, 14)

Oyster’s Proposed Construction	Ciena’s Proposed Construction
No construction necessary: “a transmitter having a laser, a modulator, and a controller”	“a transmitter having a laser, a modulator, and a controller located within the transmitter. ”

The “claim construction inquiry ... begins and ends in all cases with the actual words of the claim.” *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002). Indeed, where a term is used in accordance with its plain meaning, the court should not replace it with different or additional language. *Thorner*, 669 F.3d at 1366-67 (“we do not redefine words. Only the patentee can do that.”).

Beginning with the disputed claim language as we must, Ciena’s construction includes *every word* in the disputed phrase. Therefore, this dispute presents a rare situation in which Ciena’s own construction confirms that no word in the disputed phrase actually needs a construction or is being used in a manner that is inconsistent with its plain meaning.²

Instead, Ciena’s faulty construction is a plain attempt to import additional words into the claim itself. Specifically, the claimed “transmitter” is already expressly required by the claim to “hav[e]”—i.e., possess—a laser, modulator and controller. *E.g.*, ’327 cl. 1. Ciena’s proposal just takes these claim requirements and adds an additional, separate one: that the controller also *be located within* the transmitter. To use an analogy, in a claim for “a phone transceiver comprising ... a transmitter component having an audio voice encoder ...” applying Ciena’s proposal would

² And to be sure, there is no indication that this dispute matters at all in this case.

maintain every word in the disputed phrase, but also add that a requirement that voice encoder “is located within the transmitter component.”

Ciena’s construction fails under controlling law. “There are only two exceptions” in which claim terms are not given their full ordinary and customary meaning: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Thorner*, 669 F.3d at 1365. Ciena cannot meet its burden of showing either exception applies, because it does not. Indeed, the Federal Circuit has warned that courts “do not import limitations into claims from examples or embodiments appearing only in a patent’s written description, even when a specification describes very specific embodiments of the invention or even describes only a single embodiment.” *See JWW Enters.*, 424 F.3d at 1335.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the counsel of record who are deemed to have consented to electronic service are being served on March 20, 2020 with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3). Any other counsel of record will be served by electronic mail, facsimile transmission and/or first-class mail on this same date.

/s/ Reza Mirzaie